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Central Intelligence Agency



Washington, D. C. 20505

File

9 July 1982

MEMORANDUM FOR: Robert B. Sims
National Security Council

FROM :
Deputy Director
Office of Soviet Analysis
Central Intelligence Agency

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SUBJECT : Census Bureau Press Conference on Soviet Trade

1. We have reviewed the Census Bureau draft press release in response to your request for CIA comment. The findings in the paper represent the latest in a chain of Census estimates.

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2. We agree with the major point made in the press release, i.e., that relating imports expressed in foreign trade rubles to Soviet domestic production understates their importance. By applying the coefficient used by FDAD to convert imports from foreign trade rubles to domestic rubles the share of such imports in national income more than doubles. In 1980, the share of imports to national income (Marxist concept) was about 20 percent. The ratio of imports to GNP (Western concept) was about 15 percent since Soviet GNP is nearly two-fifths higher than Soviet national income. (These shares refer to total imports; hard currency imports from the West represent less than two-fifths of Soviet imports.) In comparison, imports accounted for about 10 percent of US GNP in 1980.

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3. It is worth noting that much of the rise in the ratio of imports to national income that occurred in the 1970s resulted from a faster rate of inflation in Soviet trade--particularly with the West--than in Soviet domestic production. The FDAD study notes that the Soviets apparently do not take such an inflation factor into account--their conversion ratios are

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adjusted only for changes in official exchange rates. As a result, imports will rise as a share of domestic production even if the ratio in real terms remains constant. A recent Soviet study indicates that import prices rose at an average annual rate of 7 percent between 1970 and 1980. At the same time, domestic Soviet prices probably rose by only a few percentage points per year on average. Thus, imports in 1970 prices may have accounted for no more than 12 percent of Soviet national income by 1980.

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4. The authors' finding that imported machinery comprises from 15 to 20 percent of all newly installed equipment in the USSR also seems reasonable. We do not, however, agree with the statement in the paper that "the share of foreign trade (when measured in actual domestic prices) in Soviet national income is 2-3 times higher than explicitly or implicitly assumed by most Western authors." In the case of imports, it is about twice as high if--as in many earlier studies--the share is derived by comparing the value of trade in foreign exchange rubles with national income in domestic rubles. For Soviet exports, FDAD used a coefficient of less than one to convert the value in foreign trade rubles to domestic rubles. Thus, the ratio of trade turnover (imports plus exports) to national income is 27 percent in 1980, which is 50 percent greater than the share derived by valuing trade in foreign trade rubles.

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5. We have not seen the final report, but we did review the draft version this past spring and discussed our few differences with the authors at that time. On balance, we believe the paper makes a significant contribution to research on Soviet foreign trade pricing.

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MEMORANDUM

NATIONAL SECURITY COUNCIL

July 8, 1982

MEMORANDUM FOR CHARLES E. WILSON
Chief, Public Affairs
Central Intelligence Agency

FROM: ROBERT B. ^{ERS}SIMS

SUBJECT: Census Bureau Press Conference on Soviet Trade

Attached is a memorandum from Mary Nimmo, Director of Public Affairs, Commerce Department, indicating plans for a press conference on a forthcoming Census Bureau report on Soviet foreign trade, plus a backup memo that provides additional details.

The press conference has been delayed until Monday, 12 July 1982, at NSC/White House request. The basic draft press release has been reviewed by Dr. Richard Pipes of the NSC staff who finds the analysis--if correct--interesting and significant.

We would appreciate CIA comment on the study by COB Friday, July 9, 1982, if feasible.

cc: Richard Pipes, NSC
Roger Robinson, NSC
Mike Baroody, White House/58
Mort Allin, White House

June 21, 1982

EARLIER PERCEPTIONS OF SOVIET DEPENDENCE ON FOREIGN TRADE CHALLENGED

Lack of reliable economic information on the U.S.S.R. often troubles U.S. policy decisions. A case in point is the current discussion regarding the effectiveness of economic sanctions against the U.S.S.R. as a penalty for Soviet involvement in Poland or as a deterrent for the future. The effectiveness of economic sanctions against a nation depends, of course, on the dependence of this nation on foreign trade and the degree of "openness" to international market forces. A forthcoming report by the U.S. Bureau of the Census provides significant new information on the importance of foreign trade in the Soviet economy.

For a long time Western specialists maintained that the Soviet economy is almost completely self-sufficient and that foreign trade plays only a marginal role. This position has been modified somewhat in the last ten years, particularly in the light of recurrent large Soviet purchases of grain and machinery, but most specialists have continued to believe that Soviet reliance on imports is minimal.

79 The key measurement in this regard is the ratio of exports and imports to national income. Since Soviet statistics do not offer these data, Western specialists have had to estimate them and until recently the consensus was that exports and imports each comprise about 3 to 5 percent of national income as the Soviets define it.

A major study of Soviet foreign trade just completed by the Census Bureau's Foreign Demographic Analysis Division has concluded that this generally held evaluation of Soviet dependence on foreign trade is in error and

by a very wide margin. The source of the error often lies in the fact that the prices at which imports are sold in the U.S.S.R. and which Soviet exporters receive for their products are very different from the external prices in which the Soviets publish the data. And, clearly, the role of foreign trade in an economy can be properly assessed only in internal prices.

These conclusions, which present the entire issue of Soviet dependence on foreign trade and potential vulnerability in a completely different light, are as follows:

-- The ratio of Soviet exports to national income is higher than had been believed earlier. In the 1970's, exports (excluding gold) averaged about 6.5 percent of national income and rose to 7 percent by 1980. 25X1

-- The ratio of Soviet imports to national income is several times higher than had been recognized heretofore. It rose from about 9 percent in 1970 to about 20 percent by 1980. 25X1

-- Imported machinery comprises from 15 to 20 percent of all newly installed equipment in the U.S.S.R. 25X1 25X1

-- Imported consumer goods and agricultural products account for about 15 percent of all consumption.

It should be stressed that these ratios, particularly the import ratio, are unusually high for a country of the size of the U.S.S.R. and suggest a somewhat unexpectedly high dependence on foreign trade. 25X1

A large share of Soviet foreign trade is with the ~~socialist~~ bloc and therefore is under fairly firm control from Moscow. But even in this instance, the general perception of the distribution of Soviet trade should 25X1

be corrected. It is true that in the early 1970's only slightly more than one third of Soviet imports came from outside the ^{COMMUNIST} ~~socialist~~ bloc but due to a number of factors the share of Soviet imports from non-^{COMMUNIST} ~~socialist~~ countries has risen to about 50 percent of total imports in 1981. Machinery and foodstuffs dominate Soviet imports, and in this respect the share of imports from non-socialist countries is also significant--at least one-third of the machinery and about 60 percent of the foodstuffs imported.


It is quite clear that the old notion of self-sufficiency in the Soviet economy should be discarded in the light of these findings.



UNITED STATES DEPARTMENT OF COMMERCE
Bureau of the Census
Washington, D.C. 20233
OFFICE OF THE DIRECTOR

July 6, 1982

MEMO TO: Mary Nimmo

From: Steve Tupper 
Special Assistant
to the Director

Subject: News Conference on Soviet Foreign Trade

Attached is a copy of the key 20 pages of the full 200-page report. I am just starting to read it myself, but assume that it will give you a better feel of what will be said at Thursday's conference.

In regards to your interest in a question-and-answer document, we do not plan to be developing one at this time. The conference will consist of Mr. Chapman making brief remarks and then introducing the report's two authors, Trembl and Kostinsky, who will then carry the major burden of presenting the report and responding to questions.

Attachment

cc: JGorman
BChapman

July 8, 1982

Excerpts From

THE DOMESTIC VALUE OF SOVIET FOREIGN TRADE:
EXPORTS AND IMPORTS IN THE
1972 INPUT-OUTPUT TABLE

by

Vladimir G. Tremi

and

Barry L. Kostinsky

Foreign Demographic Analysis Division
U.S. Bureau of the Census
(forthcoming, 1982)

IV. THE AGGREGATE VALUE OF EXPORTS AND IMPORTS IN DOMESTIC PRICES

An understanding of the role played by foreign trade in the economy of a country and of the relationship between export-import flows and national income accounts is one of the most interesting and important elements of economic analysis. The foreign trade participation ratio, that is, the ratio of the foreign trade turnover (exports plus imports) to national income, is a direct reflection of a nation's dependence on foreign trade. Major changes and structural shifts in exports or imports produce changes in national income and other national aggregates, and analysis of changes in these aggregates can never be complete without an evaluation of the foreign trade component in them. Unfortunately, these aspects of the analysis of Soviet foreign trade have been somewhat neglected by Western scholars, primarily because of uncertainties surrounding the measurement of foreign trade in domestic values. Such measurement is the focus of this chapter.

As explained in chapter III, practically all the data on the value of foreign trade usually reported in Soviet sources are expressed in foreign trade rubles. Rarely do Soviet authors give any figure based on domestic values, and when they do it is in the form of some derivative such as percentage of national income. One remarkable exception to this practice is found in a recently published book on Soviet gross social product and financial balances. The author, Sh. B. Sverdlik, analyzes various financial flows in the economy in simplified input-output format and offers, among other interesting and generally unavailable statistics, a tabulation of exports and

imports in domestic prices for the period 1959-75.¹ This unique set of statistics is presented in appendix D of this report.

The export and import values given in this tabulation differ from the estimates made in this chapter (see table 1) but not by a particularly significant margin; the largest discrepancies occur in some of the export values for later years. The differences cannot be resolved at present because of a number of uncertainties regarding Sverdlik's data. He may have had access to some unpublished official statistics, but he seems to have relied mainly on a variety of estimating procedures to arrive at his final values. His documentation and methodological explanations for the entire book are rather sketchy and ambiguous, and this applies particularly to the foreign trade component of his model. He explains his foreign trade values in domestic prices in a few brief paragraphs as being based on 1959 input-output conversion coefficients and extrapolated from there, with adjustments for values from the 1966 and 1972 input-output tables. There also are some apparent aberrations in the series that cannot be explained. The author himself stresses the methodological nature of his work and warns that his calculations "cannot pretend to a high degree of accuracy."²

Despite the reservations about the precision of Sverdlik's data, and despite the differences between individual values in his series and ours, his data do in general provide strong support for our contention that the role of foreign trade in the Soviet economy is much greater than appears from

¹Sverdlik, *Obshchestvennyy*, 1981, pp. 63-64, 179, and 182-183. The author is relatively unknown, but the book was published under the auspices of the prestigious Institute on the Economics and Organization of Industrial Production of the Siberian Division of the Academy of Sciences of the U.S.S.R., and the "responsible editor" (*otvetstvennyy redaktor*) is K. K. Val'tukh, a prominent Soviet econometrician and input-output specialist.

²*Ibid.*, p. 4.

the statistics reported in foreign trade prices and that this role has been increasing substantially. For example, the participation ratio derived from our estimates rose from 12 percent in 1960 to 21 percent in 1975, while Sverdlik's data imply ratios of 11 and 25 percent, respectively. This contrasts with ratios of 7 to 14 percent calculated from data in foreign trade prices.

However, the Sverdlik model is, as already noted, a rare case of Soviet use of properly measured foreign trade values in analysis of the domestic economy. In most cases, Soviet authors use export and import statistics in foreign trade prices in combination with national income or other measures valued in domestic prices.¹ Nor are Western analysts immune to this type of mixed-data operation. Failure to take into account the differences between the value of exports and imports in foreign trade prices and national income data in domestic prices invariably leads to serious understatement of the true role that foreign trade has played in Soviet economic development.²

¹See, for example, the recent Gosplan analysis of the regional effects of foreign trade described in chapter II (Nekrasov, *Razvitiye*, 1981, p. 16). Other examples can be found in Sorokin, "Leninist," 1975, and Senin, *Sotsialisticheskaya*, 1969.

²As an example, the World Bank has used this type of mixed-data calculation to compute the Soviet foreign trade participation ratio for a number of years (see World Bank, *World*, 1976, pp. 414-415).

Not only are such mixed-data calculations misleading, they often yield results that are patently absurd. This is especially true when there are significant changes in the official exchange rates, as is illustrated in the following example comparing data for 1960 and 1961 (in millions of current rubles):¹

	<u>1960</u>	<u>1961</u>
Sum of exports and imports in foreign trade prices.....	4,477	10,643
National income in domestic prices....	145,000	152,900
Trade participation ratio, percent....	3.1	7.0

Clearly, the Soviet foreign trade participation ratio did not double in one year, and the reason for the apparent sharp increase lies in the change in the official exchange rate from 4 rubles per dollar in 1960 to 0.9 in 1961.² With the foreign trade data in domestic prices presented below (see

¹ *Nar. khoz.* 63, pp. 501 and 548, and TsSU, SSSR, 1961, p. 101.

² It must be added that simultaneously with changing the official foreign exchange rate from 4 rubles to 0.9 rubles per dollar, Soviet authorities reduced all domestic monetary values by a factor of 10, in effect producing a 10-fold drop in prices, incomes, debts, etc. Thus the calculations shown above for 1960 can be presented as follows:

Sum of exports and imports in dollars....	\$11,193 million
Same converted to foreign trade rubles	
of 1960 (\$11,193 x 4).....	44,770 million rubles
Same converted to foreign trade rubles	
of 1961 (\$11,193 x 0.9).....	10,073 million rubles

(the ruble values are given in TsSU, SSSR, 1961, p. 101).

...the period... ratio can be calculated as 11.9 percent in 1961, a much more plausible change.

...writing on Soviet foreign trade are aware of the... and foreign trade rubles and of the distortive... of the ruble through use of official exchange rates. With few exceptions, however, they have tended, for a variety of reasons, to overstate seriously the magnitude of exports and imports measured in domestic prices, particularly in the late 1960's and early 1970's. Thus, a sample of Western authors surveyed for this study... exports and imports are each estimated at about 3 to 4 percent of national income in current prices (net material product). This is significantly lower than the ratios estimated... calculated from data presented below, in the mid-1960's exports and imports comprised, respectively, 4 and 8 percent of national income when measured in domestic prices; by the early 1970's, respectively, 6 and 11 percent. By 1978, the total trade turnover reached 25 percent of national income, and it has... Soviet Union's participation in world trade relative to its national income is in fact two to three times higher than... other researchers.

The importance of this conclusion cannot be overemphasized. The long... trade is unusually small for an industrialized

...153-159; Jacobs, "Global," 1978, p. 209; ... "Trade," 1978, p. 8; Garvy, *Money*, 1977, p. 137; ... p. 98-100; Holzman, "East-West," 1973, p. 683; ... 1969, p. 182. For exceptions to this general... "Export," 1979, pp. 347 and 369; Gardner, ... 1979-80; and Wiles, *Communist*, 1966, pp. 438-439.

nation should be discarded. Foreign trade has clearly played an increasingly significant role in the Soviet economy, with a growing dependence on imports in some branches (machinery, consumer goods, chemicals) and increasing importance of foreign markets for others.¹ However, a comprehensive analysis of the role of foreign trade in the Soviet economy is beyond the scope of this study, and we return to the discussion of foreign trade statistics.

The difficulty of interpreting the foreign trade statistics of the U.S.S.R. and the general state of confusion created by the fact that these statistics may be given in either foreign trade prices or domestic prices can be illustrated by the following data taken from monographs written by two prominent Soviet foreign trade specialists (the figures represent the ratio of exports to national income and pertain to 1970):²

	<u>Bogomolov</u>	<u>Shmelev</u>
Bulgaria.....	26	24
Hungary.....	38	29
German Democratic Republic....	25	20
Poland.....	22	16
Rumania.....	22	18
Czechoslovakia.....	24	18
U.S.S.R.....	(NA)	7

NA Not available.

Both of these sources were published in 1979; the description of the data is the same in both; and in both the ratios are said to have been "calculated by the Institute of the Economics of the World Socialist System of the U.S.S.R. Academy of Sciences." From this evidence, one could justifiably expect that the two sets of ratios should be identical or at least very close.

¹For a more comprehensive discussion of the importance of foreign trade to the Soviet economy see Trembl, "Foreign," 1980, pp. 184-207.

²Bogomolov, *Upravleniye*, 1979, p. 9, and Shmelev, *Sotsializm*, 1979, p. 38.

Yet not only are they different, the discrepancies are so large that there must undoubtedly be some fundamental differences in methodology or basic data or both, despite the fact that they are described in identical terms. Presumably, if Bogomolov had given a ratio for the U.S.S.R. it also would have differed substantially from Shmelev's.

The potential importance of Shmelev's data is enhanced by the fact that he also gives the Soviet export ratio for 1978, a figure that is not available in any other Soviet source. However, the obvious inconsistency between his data and Bogomolov's in the above example casts doubt on the reliability of his figures for the U.S.S.R. as well. Furthermore, Shmelev's ratio of 7 percent for the U.S.S.R. in 1970 is somewhat different from that given by another Soviet author, Katushev, who states that "in 1970 exports comprised 6.3 percent of Soviet national income."¹ Since the 1970 export ratio in foreign trade prices is only 4 percent, it seems clear that both Shmelev and Katushev must be dealing with values in domestic prices and thus should have derived the same ratio. We have no explanation for why they did not. However, because of the importance of Katushev's position (Secretary of the Central Committee of the CPSU and permanent U.S.S.R. representative in CEMA), because of the authority of the source (*Kommunist* is the official journal of the CPSU), and because Katushev's figure is more in line with other data, the authors of this report have decided to accept his (unrounded) ratio in preference to Shmelev's.

In this area, Soviet input-output statistics are invaluable in that they provide the only reliable source, aside from some scattered references, that gives the value of exports and imports in domestic prices that is fully

¹ Katushev, "The World," 1972, p. 22.

consistent with national income accounts. The authors of this study have made use of the foreign trade data in absolute value terms that were recorded in the 1959 input-output table,¹ and in a previous study they estimated or derived similar data for later years on the basis of input-output statistics.² In fact, time series on exports and imports in current domestic prices for a number of years were developed in this earlier study. In the current report this series is extended to later years and the earlier estimates are adjusted on the basis of some new evidence found in recently published Soviet sources and a firmer understanding of the methodological and classificational issues involved.

Estimates of the domestic value of exports and imports for a period of years are summarized in table 1, and their derivation is documented and explained in appendix B. It must be stressed that the accuracy of the individual estimates varies considerably. For both exports and imports the figures for some years can be considered firm since they are derived either from absolute values or ratios given in authoritative input-output sources, or from percentages reported by prominent Soviet economists and government officials. The estimates for other years are less reliable, as they are based on interpolation of domestic-to-foreign price conversion coefficients and changes in domestic and foreign trade prices. However, since reliable data were found for approximately every fourth or fifth year the possible errors in the estimates for the intervening years are not likely to be large.

The values in foreign trade prices in table 1 are shown as defined and published in standard Soviet statistical sources such as the annual handbook

¹Aganbegyan and Granberg, *Ekonomika-matematicheskiiy*, 1968, pp. 94-95.

²Kostinsky and Treml, *Foreign*, 1976.

Table 1. VALUE OF SOVIET FOREIGN TRADE: 1955 TO 1978
(In millions of rubles)

Year	Exports			Imports		
	Value		Conversion coefficient ¹ (c _e)	Value		Conversion coefficient ² (c _m)
	In foreign trade prices	In domestic prices		In foreign trade prices	In domestic prices	
	(1)	(2)		(4)	(5)	(6)
1955.....	3,084	2,960	.96	2,755	(NA)	(NA)
1956.....	3,254	3,156	.97	3,251	(NA)	(NA)
1957.....	3,943	3,785	.96	3,544	(NA)	(NA)
1958.....	3,869	3,869	1.00	3,915	(NA)	(NA)
1959.....	4,905	5,320	1.08	4,566	9,150	2.00
1960.....	5,007	5,307	1.06	5,066	12,000	2.37
1961.....	5,999	5,885	1.09	5,245	12,590	2.40
1962.....	6,328	6,898	1.09	5,810	13,480	2.32
1963.....	6,545	7,134	1.09	6,353	13,850	2.18
1964.....	6,915	7,537	1.09	6,963	14,760	2.12
1965.....	7,357	8,387	1.14	7,253	15,740	2.17
1966.....	7,957	9,614	1.21	7,122	15,639	2.20
1967.....	8,687	12,075	1.39	7,683	18,130	2.36
1968.....	9,571	15,409	1.61	8,469	19,987	2.36
1969.....	10,490	17,099	1.63	9,294	21,934	2.36
1970.....	11,520	18,300	1.59	10,559	24,919	2.36
1971.....	12,426	18,639	1.50	11,232	26,508	2.36
1972.....	³ 12,734	17,819	1.40	13,309	31,375	2.36
1973.....	15,802	20,227	1.28	15,544	37,927	2.44
1974.....	20,738	23,227	1.12	18,829	41,612	2.21
1975.....	24,034	22,900	.95	26,671	54,400	2.04
1976.....	28,022	24,659	.88	28,733	60,914	2.12
1977.....	33,255	27,269	.82	30,093	65,001	2.16
1978.....	35,670	28,893	.81	34,554	78,438	2.27

NA Not available.

¹As defined in equation (2).

²As defined in equation (3).

³The values reported in Soviet foreign trade sources include some services that are not recorded in input-output tables. The proportion of such services in total exports is quite small, amounting to about 1 percent in the early 1960's and declining to 0.5 percent in the early 1970's. For 1972, the value of such services is estimated at a little over 68 million rubles (see chapter VI, section B), and this value is subtracted from total exports in the input-output calculations in chapter VII.

Source:

Columns 1 and 4: Vneshtorg 19--, various issues.

Columns 2, 3, 5, and 6: Appendix B.

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$\frac{T}{NI}$

$\frac{T}{GNP}$

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of the MFT, *Vneshnyaya torgovlya SSSR*. These values are in prices f.c.b. the Soviet border for exports and f.c.b. the foreign shipping point for imports. They exclude noncommercial shipments and monetary gold but include reexports. The focus throughout this study is on commodity or merchandise trade as defined in Soviet statistics, so capital movements and invisibles (services, tourism) are excluded although some elements of the latter (such as services, patents, and documentation provided with complete industrial plants) are included. However, the combined value of services of this nature and reexports is quite small, probably about 1-2 percent, and can be disregarded.¹

Exports and imports in domestic prices are measured in current purchasers' prices. For exports these are the prices received by the manufacturing enterprises, plus shipping and handling charges. For imports they are the prices actually paid by the final purchasers in the U.S.S.R., including all applicable taxes and customs duties as well as shipping and handling charges. A detailed description of Soviet export and import pricing procedure is presented in chapter V.

The conversion coefficients or domestic/foreign trade ruble ratios tabulated in table 1 are important measures of the relative purchasing power of the ruble. Changing the denominator from foreign trade rubles to U.S. dollars, using official Soviet exchange rates, will yield a ruble/dollar parity. The conversion coefficients shown in the table are, of course, average coefficients weighted by the physical quantities of commodities entering Soviet foreign trade.

Probably for most purposes the most meaningful aggregate measure for any given year would be an average export-import conversion coefficient for

¹Belkin and Geronimus, *Model'*, 1976, p. 137.

total trade turnover, obtained as the ratio of the sum of exports and imports in domestic prices to their value in foreign trade prices. A sample of such average ratios derived from the data in table 1, plus the ruble/dollar ratios that can be calculated from them, follows:

	Average export-import conversion coefficient	Official ruble/dollar exchange rate ¹	Ruble/dollar ratio based on total foreign trade turnover
1965....	1.651	0.900	1.486
1970....	1.957	0.900	1.761
1972....	1.895	0.824	1.561
1975....	1.525	0.720	1.098
1976....	1.508	0.754	1.137
1977....	1.451	0.736	1.068
1978....	1.523	0.681	1.037

Comparison of the ratios in the second and third columns shows that the official ruble/dollar exchange rate significantly overstates the value of the ruble although the extent of the overvaluation has declined from almost 100 percent in 1970 to about 50 percent in 1978.

The recording of the domestic values of exports and imports in national income and input-output accounts, described in abstract terms in chapter III, can now be illustrated with actual values, using data for 1972 from table 1.

The two key foreign trade balances for 1972 are (a) the balance in foreign trade prices converted to domestic rubles by means of a conversion coefficient as in equation (7):

$$B_d = (Q_e P_f - Q_m P_f) c_m = (12,734 - 13,309) 2.36 = -1,357 \text{ million rubles,}$$

and (b) the import-export balance in domestic prices given in equation (4):

$$F = (Q_m P_d - Q_e P_d) = (31,375 - 17,819) = 13,556 \text{ million rubles.}$$

The two combined equal 12,199 million rubles and constitute the so-called

¹CIA, NFAC, *Handbook*, 1980, p. 54.

special earnings of foreign trade. In standard Soviet national income accounting this value is incorporated in the national income produced by the trade and distribution sector, but in input-output tables it is omitted.

It is rather difficult to verify the accuracy of this estimate because of other differences in the definition of national income produced in the trade sector. The difficulty is compounded by the fact that Soviet statistical sources lump national income produced in trade with national income produced in forestry and in other branches of material production. For 1972 the national income in these three sectors is reported as 37,200 million rubles, while the sum of their value-added elements in the reconstructed input-output table is 23,623 million, leaving a difference of 13,577 million rubles. This is appreciably higher than the estimated foreign trade balance of 12,199 million rubles. However, some adjustments are needed before comparing these two values.

In the first place, the standard definition of national income produced in the trade sector includes some turnover taxes levied on agricultural products purchased by the trade system and sold directly to consumers, bypassing the processing industries.² Since by definition the trade sector is a service sector and does not produce any material goods, it generates no turnover tax; it must therefore be assumed that this tax payment is moved in the process of preparation of the input-output table from the trade sector to the appropriate industrial sectors. The amount of this tax is rather small, constituting between 0.3 and 0.4 percent of total

¹ *Nar. khoz.* 73, p. 604.

² Gosplan SSSR, *Metodicheskiye*, 1980, p. 72; Gosplan SSSR, *Metodicheskiye*, 1974, p. 610.

turnover tax revenue.¹ Assuming the higher end of the range applies, this element was estimated approximately as 220 million rubles.

The second adjustment is more difficult to quantify. It appears that the actual value of material purchases in the combined trade, forestry, and other branches sectors is significantly higher than that incorporated in the standard national income accounts. In standard national income statistics the material cost and depreciation recorded in the combined sector in 1972 are equal to 6,100 million rubles (gross social product of 43,300 million rubles less national income of 37,200 million rubles).² The analogous figure derived from the 1972 input-output table is 6,944 million rubles, higher by 844 million rubles. It is not unreasonable to assume that input-output specialists identified some material costs that they moved from national income to the first quadrant. There is evidence to suggest that the Central Statistical Administration makes some rough approximations when it divides the costs of services between material purchases and elements of national income in estimating the national income generated in the trade and distribution sectors.³ Input-output specialists, on the other hand, have to be much more precise in determining the distribution of all material costs among 110 producing sectors. We thus conclude that in the preparation of the 1972 input-output table some 844 million rubles were removed from the value-added quadrant and added to the first quadrant.

¹V. Semenov, *Rcl'*, 1973, p. 367; Anisimov, "On Problems," 1972, p. 35; and Birman, *Ocherki*, 1968, p. 55.

²*Nar. khoz.* 73, p. 57.

³For example, according to Petrov, *Kurs*, 1961, p. 355, the cost of rental and upkeep of trade premises is mechanically divided 50-50 between materials and labor. Another source (Bazhan, *Statistika*, 1962, p. 11) indicates that material costs in some activities in "other branches of production" are negligible and are not separately identified but are simply included with national income.

There are some additional accounting puzzles where neither the standard national income nor the input-output methodology is clear, such as the subsidy on fresh vegetables and the accounting of goods sold at discount, but these issues are not even mentioned in the Soviet literature and must remain open.

With the adjustments described above, the reconciliation is as follows (in millions of rubles):

National income produced in trade, forestry, and other branches as officially reported.....	37,200
Less turnover taxes removed from the trade sector.....	220
Less material costs included in national income produced and moved to the first quadrant of the input-output table.....	844
Less value-added shown in the input-output table.....	<u>23,623</u>
Residual equal to "special earnings of foreign trade".....	12,513

This figure is sufficiently close to the independently-estimated balance of 12,199 million rubles to enable us to accept the latter as correct.

A complete analysis of the role and importance of foreign trade in the Soviet economy is beyond the scope of this study. However, one of the main findings of the study is that the share of foreign trade (when measured in actual domestic prices) in Soviet national income is 2-3 times higher than explicitly or implicitly assumed by most Western authors. This observation is, of course, of crucial importance for analysis of the role of foreign trade in the economy.

Having said this we must always remember the somewhat artificial nature of analyses of Soviet national aggregates as measured in existing values. Soviet prices are not equilibrium or even scarcity prices but are set by government fiat, and in a system which relies so extensively on taxes differentiated by buyers and on subsidies, these administered prices often

have little or no relationship to the true value of the product for the economy. The domestic prices received by Soviet manufacturers of goods for export and those paid by domestic buyers of imports are no better.

Accordingly, to ascertain the true role of Soviet foreign trade and the trade participation ratio we would have to recompute all Soviet national aggregates in terms of factor cost or in some other values approaching equilibrium prices--a task that is probably impossible or at least very difficult because of the absence of the necessary data.

V. SETTING DOMESTIC PRICES FOR EXPORTS AND IMPORTS

One of the main purposes of this study is to estimate the domestic values of some 60-70 classes of goods exported from and imported into the U.S.S.R. in 1972 for incorporation into the 1972 reconstructed input-output table. Analysis of the differences between the foreign trade and domestic prices of exports and imports and an understanding of the principles governing domestic price formation were considered necessary as a basis for developing the estimation procedures. However, after the review of Soviet literature and empirical evidence was completed and a basic understanding of price formation was achieved, this understanding turned out to be of only marginal usefulness in making the estimates. Most of the estimates of the domestic values of exported and imported goods were made on the basis of empirical data which yielded the domestic values of large blocks of goods and which were then disaggregated to the level required in the 1972 table. In only a few cases was the understanding of the methodology of price formation applied directly in the process of estimation.

Our analysis of this methodology and the associated body of rules, as summarized in this chapter, was nevertheless important because it enabled us to evaluate the accuracy of the overall magnitudes of export and import flows and conversion coefficients. For example, the empirically derived estimates of the values of Soviet machinery exports and imports would have appeared too high without an understanding of the system of export price supplements and the use of fixed conversion coefficients in setting domestic prices for imported goods.

In a broader sense, the understanding of the rules governing the setting of domestic prices for exports and imports gained in the process of working on this study also provides some insights into the overall issue of the Soviet price system. The methodology of price setting and the nature and role of prices in a socialist economy have been among the key issues in Soviet academic and government circles since the late 1950's, and an ever increasing flow of articles and monographs has been devoted to the theoretical and empirical aspects of the price system. For a long time, however, the problem of determining the domestic prices of exports and imports remained a "non-issue," barely mentioned in the literature. The reason is that in theory the problem does not exist. For example, the standard Soviet textbook description of domestic price setting for goods in foreign trade suggests that goods manufactured for export are priced at the same level as similar goods produced for the domestic market while imported goods are priced at the level of prices for similar goods produced domestically. This system of pricing, combined with the inconvertibility of the ruble, is said to ensure complete insulation of the domestic economy from foreign influences and possible external disturbances. Western authors, although they have done much by way of describing and analysing the Soviet price system, have also implicitly accepted this standard Soviet position and have, unfortunately, neglected almost entirely the issue of domestic prices in the foreign trade sector.

The real situation has for some time been quite different on both the export and the import side. As will be described in greater detail below, a large share of imports is priced without regard to prices on similar goods produced domestically, and the domestic prices paid by the buyers on imports are directly or indirectly linked to world market prices. Similarly, a large share of export goods is priced at levels substantially higher than

prices of similar goods produced for domestic users. The prices received by the producers of export goods are also linked to foreign market prices, although the degree of interdependence is less than in the case of imports. This situation is beginning to be reflected more realistically in the literature, although foreign trade is still treated very superficially in most standard Soviet texts.

It is thus incorrect to say, as some Western authors still do,¹ that the Soviet economy is insulated from external price changes.

The principle of setting the domestic price of a product manufactured for export at the level of the price of an identical product earmarked for a domestic buyer rests on the premise that the two products cost the same to produce. This, however, is not the case with many Soviet products manufactured for export. In the first place, export trade requires special foreign language markings and instructions, possibly special packaging and crating for a longer voyage, or some modifications specified by the importer. However, the main reason for differences in cost between domestic and export goods seems to be a need for basic upgrading of the quality of Soviet products in order to make them competitive in world markets. The standard of quality in this context is interpreted in the broadest sense possible, covering such characteristics as painting and finishing, more durable materials, closer tolerances, longer expected useful life, extra safety features, availability of spare parts, etc. The evidence available in Soviet and Western literature indicates that, as a rule, the quality standards of Soviet manufactured goods are lower than the quality standards

¹ See, for instance, Nove, *The Soviet*, 1977, p. 247.

expected in goods entering world markets and, therefore, Soviet export goods have to undergo certain modifications and improvements before they can be offered competitively abroad. Soviet manufacturers of export goods are compensated for such improvements and modifications and this extra cost is added to the domestic price. The differences between Soviet and world market quality standards are, of course, not uniform, and both the level of compensation for the additional costs required to close the quality gap and the mechanism for determining the form and method of compensation differ from one product to another.

There are at least two different systems for setting domestic prices on export goods. The first system, which consists of special price supplements, is used for machinery, some chemicals, and consumer appliances. The second is based on special export price catalogs and is used for petroleum products, lumber, and woodworking products.

The system of export price supplements was introduced in 1958. Recognizing the need for modifications and quality improvements in machinery produced for export, the Soviet Government established special markups or supplements to the domestic price of the basic machine to compensate the producer for the additional costs incurred. Machinery price supplements expressed as a percentage of the enterprise price for a comparable machine produced for the domestic market ranged from 5 to 25 percent for machinery earmarked for general destination export and 15 to 75 percent for export to tropical countries. These supplements were increased in 1964 and revised again in 1967, 1973, and in 1975.¹ The unweighted average supplements established in 1964 were 24 percent for general destination exports and 58

¹The evolution and operation of this system are described in detail in Trembl, "The Inferior," 1981.

percent for tropical exports and became 28 and 44 percent, respectively, after the 1975 revision.¹

The exact nature of the differences between general destination and tropical exports is not clear but the evidence suggests that the destination is not the real issue but that the two categories simply represent two grades of quality. In any case, it appears that practically all machinery produced for export undergoes some improvement and modification necessary to meet world quality standards and that the additional costs are covered by price supplements. It is probably safe to assume that, on the average, the special export price supplements range between 30 and 40 percent of the enterprise price for comparable machines produced for the domestic market. There is evidence to suggest that consumer appliances and chemicals, and possibly other manufactured goods produced for export, are also subject to similar special price supplements.

The second method of setting domestic prices for export goods consists of establishing fixed prices at levels higher than prices for comparable domestic goods and announcing these prices in special export price catalogs. Such catalogs have been issued for petroleum products, lumber, woodworking products, and possibly other goods.² The rules governing the setting of these prices are not known, but the available descriptions of quality standards and prices for lumber and woodworking products clearly show the same pattern as in the case of machinery: goods produced for export are

¹Supplement rates are available for 88 machinery groups for 1954 and for over 100 groups for 1975. Tests indicate that the average rates are rather insensitive to alternative weighting schemes.

²For prices on lumber and woodworking products produced for export see Bursin, *Tsenobrazovaniye*, 1977, pp. 64-78, and Kanevskiy and Shaytanov, *Lesnoy*, 1975, pp. 196-203.

expected to meet higher quality standards and are priced at a higher level than comparable goods produced for the domestic market.

One problem concerning the domestic pricing of exports must be noted but cannot be resolved in this study is the treatment of subsidized products. Soviet industry produces a number of goods that are subsidized by the state budget, such as certain types of children's apparel, notebooks, and a whole range of food products, with particularly high subsidies on dairy and meat products. Food products are subsidized through a system in which the prices paid by industry for agricultural raw materials are lower than the prices received by agriculture, i.e., state procurement agencies pay high prices to agricultural producers and sell the procured materials to processing industries at substantially lower prices, with the difference being covered from the state budget.¹ Although the Soviet Union is not a major exporter of processed foods, it does export some goods that are on the list of subsidized products.

The system of food subsidies was introduced to increase the incomes of agricultural producers without raising the retail prices paid by consumers. Clearly, the restraint displayed by the Soviet authorities in connection with retail prices on food would be less necessary in the pricing of food products earmarked for export. The food industry could conceivably sell its products to export agencies at prices that would recoup the initial subsidy. However, it would seem that the accounting and cost controls for such a system of prices would be too complex and perhaps unworkable. In the absence of any reference to this problem in the literature, it is

¹See Trembl, *Agricultural*, 1978.

assumed here that foreign trade organizations buy processed foods at the general enterprise price level (i.e., subsidized) plus export price supplements, if any.

The setting of domestic prices for imported goods is equally complex, and a number of issues are not clear. As in the case of exports, the statement that the domestic prices of imported goods are set at the level of prices for comparable goods produced domestically is not true for the majority of imports. There are two groups of imported commodities distinguished by differences in price setting rules.

In the case of consumer goods, the rule of setting prices on imported goods at the level of comparable domestically produced goods is ignored for the most part; official announcements of domestic price increases simply justify these increases by the rise in prices on world markets. This recently happened to prices on coffee and cocoa and a number of other products. Similar direct links between world market prices and domestic import prices have been observed even in cases of some intermediate producer goods such as paper.¹ Despite all the evidence of interdependence between domestic and foreign prices on imported goods, however, there is no mention of such direct links in the Soviet economic literature. Domestic prices are apparently set on an ad hoc basis by the State Committee on Prices and the Ministry of Foreign Trade, and linkage to foreign trade prices is not automatic but is only one factor taken into account. For example, Soviet retail prices on flour, bread, and refined sugar have remained constant despite fluctuations in world prices of grains and raw sugar. In most cases, however, imported consumer goods are prices higher than similar domestic ones.²

The stated rule of setting prices on imported machinery at the level of prices for comparable domestically produced machines is complicated by the

¹See Trembl, "Foreign," 1980, pp. 192-193.

²Supplementary distribution cost markups allowed on certain imported items (Zav'yalkov, Tseny, 1981, p. 324) increase their domestic price and may be used as a vehicle for raising prices more than would otherwise be justified.

difficulty of identifying Soviet analogs for imported machines. In many, if not most, cases the reason for importing a given machine is that Soviet industry does not produce it or produces it in insufficient numbers and therefore, probably, at a "temporary" price. Such item-by-item comparison is a difficult and time consuming task. This method is still being presented in the general literature as the basic approach, but the actual practice of setting domestic prices was simplified in 1960 when the State Committee on Prices introduced average conversion coefficients for different machinery groups to be applied to the "foreign trade prices" of imported machinery.¹ In this method, the price for an imported machine paid by the U.S.S.R. Ministry of Foreign Trade or one of its agents is first converted from the foreign monetary unit to "foreign trade rubles" on the basis of the official exchange rate set by the U.S.S.R., and this ruble price, now referred to in Soviet literature as "*fakturnaya tsena*" or "*fakturnaya tsena*,"² is then converted to a domestic price by means of one of the special conversion coefficients. No exact information is available on the magnitudes of the conversion coefficients set in 1960, but it appears that by the mid-1960's they averaged about 0.7.³

Following the July 1967 price reform, a new set of conversion coefficients was established and has remained in effect to the present.⁴

¹Shapiro, *Smetnyy*, 1968, p. 108. The resulting domestic prices are not necessarily equal to those of domestic analogs. For example, certain types of oil industry equipment cost two or more times as much as similar domestic equipment (Samedli and Karysheva, "Improving," 1981, p. 32).

²These terms are of relatively recent vintage. See Mukhin and Grigor'yev, *Uchet*, 1979, p. 124, and Shapiro, *Smetnyy*, 1968, p. 108.

³See Kostinsky and Treml, *Foreign*, 1976, p. 11.

⁴The basic coefficients introduced in 1967 were referred to in a 1970 source (Shelikhov, *Spravochnik*, 1970, p. 54) and in 1974 (Grinev, "The Economic," 1974, p. 32). Apparently new conversion coefficients for machinery imported from CEMA nations were introduced in 1974 but were subsequently withdrawn without explanation and the 1967 set was declared to be still in effect in 1977 (Shapiro, *Smetnyy*, 1977, p. 104).

Presumably, the individual coefficients were to remain unchanged unless either the foreign trade price of the imported machine or the domestic price of the Soviet counterpart changed by more than 10 percent, in which case the State Committee on Prices would adjust the conversion coefficient.

We do have a relatively large sample of these 1967 coefficients in one Soviet source.¹ They range from a low of 0.5 to a high of 2.0, for an unweighted mean of 0.92 for 159 types of machinery. The spread is relatively narrow, with 112 types falling within 0.8-1.2. Some imported machinery items, particularly prototypes of new models, are still priced on an individual basis with rather high ratios. It is impossible to ascertain the share of such machines in total imports but it is probably relatively small, and we can assume assumption that the average conversion coefficient introduced in 1967 was about 0.9 for all types of machinery.

Following the devaluation of the dollar, the Soviet Government announced in 1972 that the policy of fixed exchange rates between the ruble and Western currencies would be discontinued, and that henceforth exchange rates would be adjusted periodically by the U.S.S.R. State Bank. The rate for 1972 was set at 0.826 rubles per dollar,² implying a 9 percent appreciation of the ruble. The exchange rates between the ruble and the currencies of the Socialist Bloc remained unchanged. The ruble exchange rates set by government fiat do not reflect the relative purchasing power of different world

¹Shapiro, *Smetnyy*, 1968, pp. 109-113. The sample does not appear to be sufficiently comprehensive, omitting such major machinery groups as metallurgical, mining, and agricultural equipment and radio-electronic products. Thus calculation of a weighted average does not appear to be warranted. However, with most of the coefficients falling within the narrow range of 0.8-1.2, the weighted average would not be significantly different from the unweighted mean of 0.92.

²*Ekonomicheskaya gazeta*, No. 49, December 1972, p. 21.

currencies. Nevertheless, changes in the official exchange rate would automatically lead to adjustments in the magnitudes of the conversion coefficients employed by Soviet statistical agencies to derive the domestic prices of imported goods.

If the 0.9 average conversion coefficient for all machinery imports also applied to imports from the West, then after the devaluation of the dollar the conversion coefficient for the latter would increase by 9 percent to 0.98. The average coefficient for all machinery imports would rise to reflect this but the increase would be smaller since in 1972 only about 25 percent of machinery imports came from the West. The remainder of Soviet machinery imports came from the Socialist Bloc countries for which the exchange rates, and therefore conversion coefficients, remained unchanged. The changes in the average machinery import conversion coefficient resulting from changes in the official ruble/dollar exchange rate are calculated in table 2.

The adjusted average conversion coefficients for machinery imports tabulated in table 2 are still only a first approximation, since they reflect only changes in the socialist-nonsocialist share of imports and the effects of depreciation of the dollar with respect to the ruble. The true coefficient would also be affected by changes in the structure of imports, and possibly by periodic adjustments in individual coefficients. However, in all probability most of these changes are minor or would tend to cancel each other. The coefficients in table 2 are close to unity, which seems reasonable since several specialists in Soviet foreign trade report that by the mid-1970's the conversion coefficients for machinery imports were indeed equal to unity.¹

¹Pekshev, "Specialization," 1978, p. 87, and Shashayev, "On Establishing," 1976, Approved For Release 2008/09/08 : CIA-RDP08S01350R000100280001-6

Table 2. COEFFICIENTS FOR CONVERTING THE VALUE OF IMPORTED MACHINERY
FROM FOREIGN TRADE TO DOMESTIC PRICES:
1972 TO 1978

Year	Average ruble/dollar exchange rate ¹	Share of imports from the West in total machinery imports ² (percent)	Adjusted import conversion coefficient ³
1972.....	.824	24.7	.938
1973.....	.739	27.0	.972
1974.....	.756	32.1	.974
1975.....	.720	40.2	1.007
1976.....	.754	42.1	.990
1977.....	.736	38.9	.995
1978.....	.681	36.9	1.024

¹CIA, NFAC, *Handbook*, 1980, p. 54. It is assumed that other Western currencies moved correspondingly.

²Based on published Soviet foreign trade data. The value of machinery imported from the West was derived by subtracting the value of machinery imported from the Socialist Bloc from the value of total machinery imports.

³Derived as the weighted average of a constant value for the coefficient for imports from the Socialist Bloc (0.9) and a changing coefficient for imports from the Western countries, with the weights determined by the respective shares in total machinery imports. The average value so derived was further adjusted upward to reflect special commission fees collected by the Ministry of Foreign Trade. According to 1968 and 1970 sources, this commission was 2 percent (Shelikhov, *Spravochnik*, 1970, p. 54, and Shapiro, *Smetnyy*, 1968, p. 106), while a 1977 source (Shapiro, *Smetnyy*, 1977, p. 105) reports it as 1.7 percent. Not knowing when the rate was changed, we used 2 percent for 1972-74 and 1.7 percent for later years.

Not much can be said about the rules governing the setting of prices for imports other than machinery and consumer goods. What little evidence there is suggests that the application of fixed coefficients for converting foreign trade prices to domestic prices, which is the basic rule for price setting in machinery imports, is not used often for other products. The Ministry of Foreign Trade and the State Committee on Prices meet periodically and set

of Economics of the U.S.S.R. Academy of Sciences also used a one-to-one correspondence between domestic and foreign trade prices for machinery imports in the mid-1970's (Belkin and Geronimus [Eds.], *Model'*, 1978, p. 252).

prices for imported goods, publishing them in import price catalogs. We know of such catalogs for coal¹ and for woodworking products.² In the 1967 price reform a total of 40 price catalogs fixing domestic retail prices for imports were published.³ However, the methodology for establishing these prices has not been discussed in the available literature. Pricing practice in the case of machinery imports and other indirect evidence suggests that prices on imported goods are set higher than prices on comparable domestic goods. The strong evidence for generally lower standards of quality in Soviet domestic production discussed above would explain why domestic prices of imports would rationally be set at higher levels.⁴ A recent Soviet book simply states that "domestic prices on imported goods are set by analogy to prices of domestically produced goods but at somewhat higher levels."⁵

It should be added that whatever may be the methods of setting domestic prices for imported goods, fluctuations in world market prices are also taken into account in addition to other factors. In the case of machinery the link to external prices through the fixed conversion coefficients described above is direct and strong. Price changes in Soviet consumer trade and even in the area of some nonmachinery producer goods suggest the same tendency.

¹Shapiro, *Smetnyy*, 1977, p. 277.

²Eursin, *Tsenobrazovaniye*, 1977, p. 78.

³Turetskiy, *Tseny*, 1969, p. 259.

⁴See Stolyarov, *O tsenakh*, 1963, p. 162; in the third edition of the same book (1969, p. 41) the author stresses the importance of quality differences in the domestic pricing of imports. For some specific price differentials showing that imported goods are priced much higher, see Ptsev, no. 4, 1980, p. 9.

⁵Plotnikov and Gusarov, *Metodika*, 1975, pp. 33-34.

As was noted earlier, the differences between Soviet foreign trade with the Socialist Bloc and Soviet trade with market economies do not concern us in this study. Input-output tables and national income accounts record exports and imports regardless of destination or point of origin, and the focus of this study is on the total value of exports and imports in domestic prices. This is not to deny, of course, that such differences exist. As a rule, prices of Soviet exports to other members of the Socialist Bloc are lower in external or foreign trade rubles than prices of similar Soviet exports to market economies. In fact, prices on most Soviet exports to other socialist countries are determined as 5-year moving averages of world market prices; during periods of rising world market prices, they would therefore be lower.

However, there is no evidence to suggest that the mechanism of setting domestic prices for Soviet exports to and imports from the Socialist Bloc differs in any significant way from the general mechanism described above. It is, of course, possible that the quality of certain goods manufactured in the U.S.S.R. for export to the socialist countries is lower than the quality of similar goods earmarked for export outside the bloc. For example, the state standards for lumber exports prescribe three quality levels: one for the capitalist countries of Western Europe, one for "Mediterranean and southern markets," and the third for domestic use, with the latter being applicable to "the majority of socialist countries."¹

Conversion coefficients used to determine domestic prices on imported machinery, and possibly other goods, differ depending on the point of origin. It appears that domestic prices for machinery imported from socialist

¹Kanevskiy and Shaytanov, *Lesnoy*, 1975, p. 22 (see also pp. 196 and 202).

countries are determined by application of fixed conversion coefficients (usually > 1) to external prices, while in the case of machinery imported from market economies the domestic price is equated with the external price, i.e., the implied conversion coefficient is equal to 1.

But for the purposes of this study these differences do not matter. In most instances, the values of foreign trade transactions in foreign trade prices represent a mix of transactions with different trading partners, and average external-to-internal price conversion coefficients are estimated.

Two additional factors should be mentioned in connection with methods of fixing domestic prices for imported goods: customs duties and turnover taxes. The Soviet Union has a system of customs duties with *ad valorem* rates ranging from zero to 50 percent on imports from countries that have extended and most-favored-nation clause and higher rates for countries that have not.¹ Neither the role of these duties nor the rules governing the establishment of rates are clear. It might well be argued that these duties are almost meaningless in price analysis. The U.S.S.R. imports a certain product, paying for it P_x dollars and selling it at home for P_y rubles. Presumably the P_y price is determined by the domestic price of a comparable product and has no relationship to the foreign trade price, whether the latter is expressed in dollars or in foreign trade rubles, or whether it includes customs duties or not. The Ministry of Foreign Trade and ultimately the state budget will receive the difference between the two prices, i.e., $P_d - P_f$, labelling it "special earnings of foreign trade."

¹MVT, *Tamozhenny*, 1971, pp. 7-19. The 50 percent rate applies to jewelry and precious stones, and this is an exception--most rates are in the 5-10 percent range.

The fact that this difference may consist of both special earnings and customs duties does not matter in price setting. It is possible that customs duties were introduced by the U.S.S.R. simply to give its foreign trade agents some leeway in bargaining with their trading partners.

As was stated above, the textbook description of the method of determining domestic prices for imported goods calls for setting them at the level of prices for comparable domestically produced goods, including turnover tax when applicable. A literal interpretation of this rule would mean that, if a domestically produced good is priced at P_d and the tax on this good is k percent of the price, a similar percentage would be collected on the sale of a comparably priced imported good. This interpretation, however, appears to be incorrect since in practice some large commodity groups, such as imported distilled spirits and tobacco products, are specifically exempt from turnover taxes.¹ One possible explanation is that the exemption is used whenever the retail price for a domestic good is not high enough to cover the turnover tax, the customs duty, and the cost of the good to the Ministry of Foreign Trade. This can be illustrated with an example involving the price of beer. In the early 1970's turnover taxes comprised 66 percent of the retail price of standard Soviet beer, which was about 0.50 rubles per liter, so the wholesale enterprise price was about 0.17 rubles. In 1975 the average price of imported beer was 0.26 rubles (in foreign trade prices), which should be adjusted upward by 25 percent to account for the customs duty, to 0.33 rubles per liter. Clearly, there was

¹Miroshchenko, *Gosudarstvennyye*, 1978, p. 66; Sorokin and Abramova, *Nachisleniye*, 1978, pp. 65, 76-78; and Yevdokimov, *Kontrol'*, 1974, p. 53. There seems to be some confusion with respect to turnover taxes on tobacco products. Yevdokimov says that imported tobacco products are exempt from the tax while Sorokin and Abramova indicate that they are taxed.

no room left for a turnover tax, unless the retail price of the imported beer were set much higher than 0.50 rubles.

Some imported commodity groups such as textiles, knit goods, and vegetable oils are taxed,¹ and the question is whether the turnover taxes levied on these goods are treated as real taxes, that is as payments channelled directly to the state budget, or are used merely for the purpose of calculating retail prices. This question is important only for the proper identification of elements in the "special earnings of foreign trade." Does the entire difference between imports and exports in domestic prices ($M_d - M_f$), accrue to the Ministry of Foreign Trade, or does a certain portion of M_d bypass the Ministry and go directly into the state budget? Unfortunately, the question cannot be answered here. The whole area of the relationship between foreign trade organizations and the state budget is too complex to be investigated fully in this study. We may simply note that only a small share of Soviet imports consists of commodities subject to turnover tax,² and some of these are specifically exempt. One of the

¹Miroshchenko, *Gosudarstvennyye*, 1978, p. 89.

²An accurate calculation of turnover taxes collected on 1972 imports is virtually impossible, and the rough estimates that follow are made to give some general idea of the relative order of magnitude. The tax rates used here are averages taken from Tretyakova, "Nalog," 1978, and domestic values derived elsewhere in this study. The estimates are broken into four commodity groups:

- a. The machinery group includes sewing machines, refrigerators and other consumer appliances, electrotechnical consumer products, musical instruments, and motorcycles. The 1972 value of imports of these commodities, 116 million foreign trade rubles, is converted to domestic prices on the basis of a coefficient of 2.0, and an average tax rate of 30 percent is used. Thus, $116 \times 2.0 \times .3 = 70$ million rubles.
- b. Furniture imports in domestic prices amount to 626 million rubles (table 23, below). This is arbitrarily reduced to 500 million to account for furniture not taxed and for furniture delivered to consumers who do not pay taxes. An average rate of 20 percent yields an estimated